

1. 何謂代謝症候群 (metabolic syndrome) ? (5%)
2. 試簡述物理治療對代謝症候群個案的角色功能和介入治療的計畫。(10%)
3. 試依照學理、實證，預期物理治療對代謝症候群個案介入後的成效。(10%)
4. 請閱讀下列文獻摘要後，簡述你對糖尿病患者可能之心臟相關問題的瞭解。(8%)

Diabetic cardiomyopathy: from the pathophysiology of the cardiac myocytes to current diagnosis and management strategies

Abstract

Diabetic cardiomyopathy (DCM), although a distinct clinical entity, is also a part of the diabetic atherosclerosis process. It may be independent of the coexistence of ischemic heart disease, hypertension, or other macrovascular complications. Its pathological substrate is characterized by the presence of myocardial damage, reactive hypertrophy, and intermediary fibrosis, structural and functional changes of the small coronary vessels, disturbance of the management of the metabolic cardiovascular load, and cardiac autonomic neuropathy. These alterations make the diabetic heart susceptible to ischemia and less able to recover from an ischemic attack. Arterial hypertension frequently coexists with and exacerbates cardiac functioning, leading to the premature appearance of heart failure. Classical and newer echocardiographic methods are available for early diagnosis. Currently, there is no specific treatment for DCM; targeting its pathophysiological substrate by effective risk management protects the myocardium from further damage and has a recognized primary role in its prevention. Its pathophysiological substrate is also the objective for the new therapies and alternative remedies.

5. 請問在心臟復健時，對於有糖尿病的病患治療師應注意的事項為何？(7%)
6. As a physical therapist, if you are about to design an education booklet for people with chronic obstructive pulmonary disease (COPD), what contents would you cover in the booklet? (8分)

(The following paragraph is adapted from Lord et al., 2010. Singing teaching as a therapy for chronic respiratory disease - a randomised controlled trial and qualitative evaluation)

見背面

A limitation of some physiotherapy approaches for changing patients' pattern of breathing is that by focusing attention on breathing pattern they may accentuate awareness of respiratory limitation. Singing requires the development of skills in controlling posture and breath that might be transferrable to everyday life. Breathlessness is a complex sensation; singing lessons might offer techniques that address both the sensory component - largely control of respiratory pattern to reduce hyperinflation, and the affective component - a conscious experience of using the breath for 'something positive'. In addition, there is some evidence that singing may have beneficial effects on wellbeing in healthy and chronic disease populations.

7. 請簡述 COPD 患者之異常呼吸形式。(5分)
8. PT 常用來改變 COPD 患者呼吸方式有哪些？(5分)
9. 造成 COPD 患者 hyperinflation 現象對呼吸的好處和壞處分別為？(6分)
10. 若設計一研究探討 singing technique 對 COPD 患者的療效，請問要如何測量其成效（測量方法和項目）？(6分)
11. 試述 systolic heart failure 和 diastolic heart failure 為何？(4分)；又兩者之異同分別為何？(6分)
12. 根據實證醫學資料，試述物理治療對心臟衰竭患者介入計畫的安全性(4分)，執行內容(8%)及預期成效(8%)。

試題隨卷繳回